## A. CLASSIFICATION OF SUBJECT MATTER IPC 7 F16L11/127

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F16L E05B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## EPO-Internal

C. DOCUMENTS CONSIDERED	TO BE RELE	VANT
-------------------------	------------	------

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3 963 856 A (CARLSON LENNART L ET AL) 15 June 1976 (1976-06-15)	1-3, 11-13,
Y	abstract; claims 1-4; figures 1-5	15,26 4,5,14, 20-22
	column 1, line 57 - column 2, line 17 column 3, line 65 - column 4, line 34	
X	GB 1 596 242 A (SUPPERFLEXIT SOC) 19 August 1981 (1981-08-19)	1-3,6, 8-13,15,
Υ	figures 1,2 page 2, line 39 - line 68	17-19,26 7,16
	-/	
į		

X Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
<ul> <li>Special categories of cited documents:</li> <li>"A" document defining the general state of the art which is not considered to be of particular relevance</li> <li>"E" earlier document but published on or after the international filing date</li> <li>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</li> <li>"O" document referring to an oral disclosure, use, exhibition or other means</li> <li>"P" document published prior to the international filing date but later than the priority date claimed</li> </ul>	<ul> <li>'T' later document published after the international filing date or priorily date and not in conflict with the application but clled to understand the principle or theory underlying the invention</li> <li>'X' document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</li> <li>'Y' document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</li> <li>'&amp;' document member of the same patent family</li> </ul>
Date of the actual completion of the international search  2 November 2004	Date of mailing of the international search report $09/11/2004$
Name and malling address of the ISA  European Palent Office, P.B. 5818 Patentlaan 2  NL - 2280 HV Rijswijk  TeL (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Balzer, R

2

	ation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	
Х	WO 99/45305 A (POLLACK RICHARD STEPHEN; BOCHE CRAIG STEVEN (US); GOODYEAR TIRE &) 10 September 1999 (1999-09-10) abstract; figures 6-9 page 6, line 15 - page 8, line 12	1	
Υ	GB 1 041 255 A (ATLAS COPCO AB)  1 September 1966 (1966-09-01)  cited in the application  page 2, line 3 - line 51  page 3, line 70 - line 72	4,5,14	
Y	US 3 070 132 A (SHERIDAN DAVID S) 25 December 1962 (1962-12-25) column 3, line 1 - line 55; figure 2	7,16, 20-22	
	·		

2

## nformation on patent family members

International Application No

				<del></del>	
Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 3963856	Α	15-06-1976	CA	1014082 A1	19-07-1977
			DE	2543811 A1	26-05-1976
			GB	1467209 A	16-03-1977
			JP	51076622 A	02-07-1976
			SE	7513189 A	26-05-1976
GB 1596242	Α	19-08-1981	FR	2379143 A1	
			BE	862652 A1	02-05-1978
			BR	7800468 A	03-10-1978
			DE	2800798 A1	03-08-1978
			IT	1091849 B	06-07-1985
			NL	7800746 A	31-07-1978
WO 9945305	A	10-09-1999	WO	9945305 A1	10-09-1999
			AU	6863798 A	20-09-1999
GB 1041255	Α	01-09-1966	FR	1377755 A	06-11-1964
US 3070132	 А	25-12-1962	NONE		